Design Decisions:

Subclass Structure

* Decided on implementing an abstract Entity class that contains all Plants and Zombies as they share many attributes(Health, Attack, Attack Speed, etc)
* While only one zombie exists now, since more will be added in the future, we created an Abstract zombie class from which our BasicZombie is a subclass.

Level Grid Structure

* To maintain scalability and organization, each level is comprised of lanes. These lanes act almost as independent games from each other since plants and zombies in one lane have no impact on the plants and zombies in another.
* Lanes are further split into spots. Each spot is able to contain up to a single plant (Those close to the right side are typically prevented from hosting plants)
* While Spots are responsible for storing the plants on the game board, since zombies can move, storing them in spots wouldn’t make sense. As a result, zombies are stored within an ArrayList in the lane objects. Initially, a queue would make more sense to store zombies, given that we could easily find out which zombies are in front. In future iterations, zombies will have different movement speeds and be able to pass one another, making this structure meaningless.